

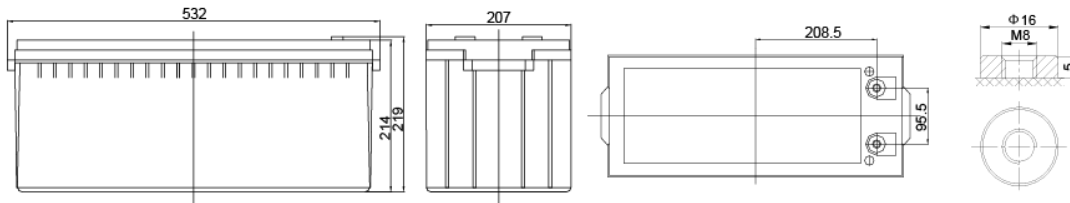


SBL 180-12i



Nominal Voltage	12 V
Nominal capacity	190,8 Ah @ C20 to 1,75 V/cell
	180 Ah @ C10 to 1,80 V/cell
Technology	AGM (Absorbent Glass Mat)
	VRLA (Valve Regulated Lead Acid)
Weight	~ 53 kg
Design life time	12 years (standby use)
	Long Life acc. Eurobat
Internal resistance	~ 4,2 mΩ (full charged)

Operating temperature range	Discharge -20°C ~ +60°C
	Charge 0°C ~ +50°C
	Storage -20°C ~ +60°C
Max. discharge current	1800 A (5 sec)
Short circuit current	2800 A
Max. charging current	54 A
Charging voltage	Standby use 13,6 ~ 13,8 VDC
	Cycle use 14,6 ~ 14,8 VDC
Self discharge	Monthly is less than 3% at 25°C
Container material	ABS UL94HB (optional UL94-V0)



Length	532 ± 2 mm
Width	207 ± 2 mm
Height	214 ± 2 mm
Total height	219 ± 2 mm
Internal thread M8 (breaking torque 10-12 Nm)	

CONSTANT CURRENT DISCHARGE CHARACTERISTICS (A at 25°C)

Voltage/Time	10 MIN	15 MIN	30 MIN	60 MIN	2 H	3 H	4 H	5 H	8 H	10 H	20 H
1.60 V	387,5	313,9	193,2	110,0	65,5	50,8	39,90	34,00	22,80	19,00	9,93
1.65 V	366,1	300,1	185,5	106,2	63,4	49,2	38,80	33,10	22,60	18,80	9,78
1.70 V	337,1	281,1	177,3	102,8	61,3	47,9	37,80	32,20	22,20	18,50	9,66
1.75 V	308,5	261,5	169,4	99,0	59,2	46,4	36,80	31,40	21,90	18,20	9,54
1.80 V	279,3	241,5	162,0	95,2	57,1	45,0	35,70	30,60	21,50	18,00	9,44
1.85 V	228,3	200,4	139,5	85,4	52,3	41,6	33,20	28,50	20,20	16,90	8,97

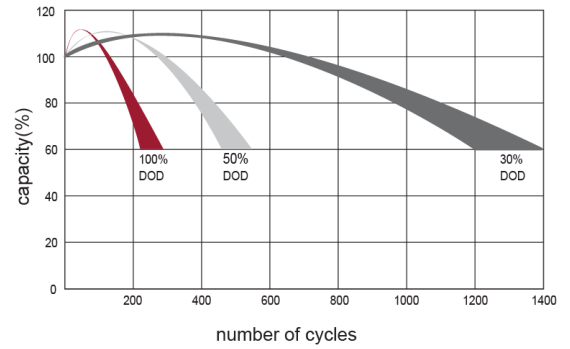
CONSTANT POWER DISCHARGE CHARACTERISTICS (W/cell at 25°C)

Voltage/Time	10 MIN	15 MIN	30 MIN	60 MIN	2 H	3 H	4 H	5 H	8 H	10 H	20 H
1.60 V	658,6	548,7	350,9	206,7	124,20	97,00	76,60	65,50	44,60	37,30	19,60
1.65 V	634,4	532,4	340,4	200,7	120,80	94,40	74,80	64,00	44,20	36,90	19,30
1.70 V	594,7	506,1	328,6	195,4	117,50	92,20	73,10	62,60	43,60	36,40	19,10
1.75 V	554,2	477,8	317,3	189,4	113,90	89,80	71,50	61,20	43,10	36,00	18,90
1.80 V	510,4	447,4	306,4	183,2	110,40	87,40	69,60	59,80	42,40	35,60	18,70
1.85 V	424,6	376,5	266,5	165,3	101,70	81,20	65,00	56,00	39,90	33,50	17,80

EFFECT OF TEMPERATURE ON LONG TERM LIFE



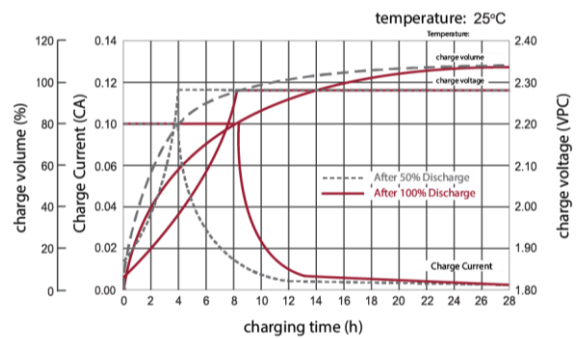
CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



DISCHARGE CHARACTERISTICS CURVE



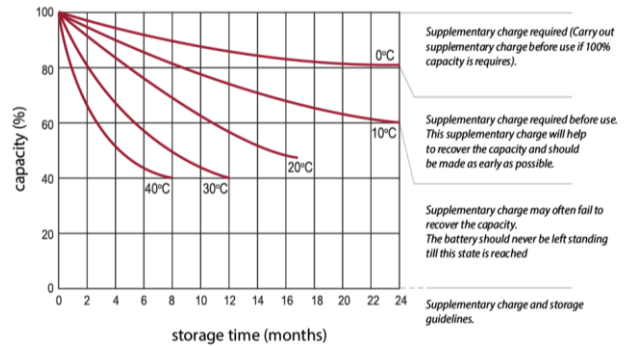
CHARGE CHARACTERISTIC CURVE FOR CYCLE USE



RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



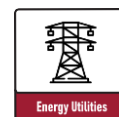
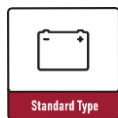
STORAGE CHARACTERISTICS



Standards met:

PN-EN 60896-21:2007 • PN-EN 60896-22:2007 • PN-EN 61056-1:2013 • PN-EN 61056-2:2013 • PN-E-83016:1999

Batteries manufactured in compliance with: ISO 9001 • ISO 14001



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